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UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Bratcher et al.  
Serial No.: 10/781,448  
Filed: February 18, 2004  
For: Flexible Processing Apparatus For Isolating And Purifying  
Viruses, Soluble Proteins And Peptides From Plant Sources  
Group No. Not yet assigned  
Attorney's Docket No. N9911  
Customer No. 34309

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

During the prosecution of the parent application Serial No. 09/970,150 Applicant filed the following listed Information Disclosure Statements and Forms PTO-1449, and received the following listed Form PTO-892 from the Patent and Trademark Office, copies of which are attached hereto. Copies of the cited references are not being enclosed since they are available in the parent file.

1. Information Disclosure Statement and Form PTO-1449 dated January 14, 2002.
2. Supplemental Information Disclosure Statement and Form PTO-1449 dated May 1, 2003.
3. Supplemental Information Disclosure Statement and Form PTO-1449 dated April 16, 2004.
4. Form PTO-1449 date stamped May 6, 2003 by Patent and

Trademark Office.

5. Form PTO-1449 date stamped January 29, 2002 by Patent and

Trademark Office.

6. Notice of References Cited Form PTO-892, Part of Paper No. 1904.

A new Form PTO-1449 listing all of the references is included for the Examiner's convenience.

Respectfully submitted,

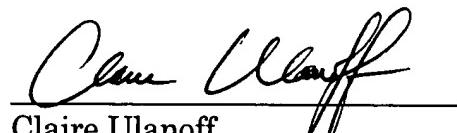


Lucian Wayne Beavers  
Registration No. 28,183  
WADDEY & PATTERSON  
A Professional Corporation  
414 Union Street, Suite 2020  
Bank of America Plaza  
Nashville, TN 37219  
(615) 242-2400  
Attorneys for Applicant

CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that this Information Disclosure Statement is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on ~~April 16~~, 2004.

MAY 19,



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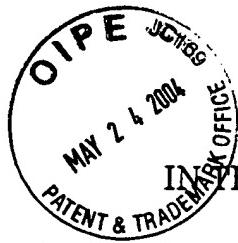
Claire Ulanoff

5-19-04

Date



Comparable to Form PTO-1449		U.S. Department of Commerce Patent & Trademark Office		Atty. Docket No.  N9911 Customer No. 34309		Serial No.  10/781,448	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicant  Bratcher et al.			
				Filing Date February 18, 2004		Group Unknown	
		Examiner Initial		Document No.	Date	Name	Class
		4,268,632	May 19, 1981	Wildman et al.	435	232	
		4,333,871	Jun. 8, 1982	De Jong	260	112	
		4,347,324	Aug. 31, 1982	Wildman et al.	435	232	
		4,540,490	Sep. 10, 1985	Shibata et al.	210	323.2	
		4,632,318	Dec. 30, 1986	Hyuga	241	37	
		4,941,484	Jul. 17, 1990	Clapp et al.	131	297	
		4,966,576	Oct. 30, 1990	Schulz et al.	494	56	
		5,121,757	Jun. 16, 1992	White et al.	131	297	
		5,131,414	Jul. 21, 1992	Fagg et al.	131	297	
		5,267,937	Dec. 7, 1993	Zettier et al.	494	56	
		5,377,698	Jan. 3, 1995	Litzinger et al.	131	370	
		5,676,631	Oct. 14, 1997	Kunz et al.	494	71	
		5,765,570	Jun. 16, 1998	Litzinger et al.	131	370	
		5,795,477	Aug. 18, 1998	Herman et al.	210	360.1	
		5,865,719	Feb. 2, 1999	Droste et al.	494	27	
		5,899,845	May 4, 1999	Kohlstette et al.	494	37	
		6,083,293	Jul. 4, 2000	Bath	71	16	
		6,106,715	Aug. 22, 2000	Thalmann et al.	210	321.83	
		6,037,456	March 14, 2000	Garger et al.	530	412	
		4,907,167	March, 1990	Skeirik	700	10	
		5,993,795	Nov., 1999	Osawa et al.	424	74	
MISCELLANEOUS DOCUMENTS							
		Samuel Wildman, "An Alternate Use For Tobacco Agriculture: Proteins For Food Plus A Safer Smoking Material" in <u>Plants: The Potentials For Extracting Protein, Medicines And Other Useful Chemicals - Workshop Proceedings</u> (U.S. Congress, Office of Technology Assessment, OTA-BP-23, Washington, DC, September 1983).					
		L. Jervis and W.S. Pierpoint (1989) Purification technologies for plant proteins, <u>Jour. Of Biotechnology</u> 11:161-198.					
		US 2002/0088024 A1 Patent Application Publication, Garger et al., Pub. Date Jul. 4, 2002.					
		Lamsal et al., Separation of Protein Fractions in Alfalfa Juice: Effects of Some Pre-treatment Methods. TEKRAK. Published September 6, 2002 by the United States Department of Agriculture Agricultural Research Service.					
		Project Progress Report - Chemical Efficiency of the Pilot Plant in Owensboro - Part IV; Author Jan Arnarp, October 11, 1995.					
		FOU Report No. 96/01 - Chemical Efficiency of the Pilot Plant in Owensboro - Part IV by Jan Arnarp, August 29, 1996.					
		NEW RIVERSIDE UNIVERSITY DICTIONARY, Published by The Riverside Publishing Company and Houghton Mifflin Company, One Beacon Street, Boston, MA 02108, USA (1984), page 589.					
Examiner:		Date Considered					
<p>*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>							



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Bratcher et al.  
Serial No.: 09/970,150  
Filed: October 3, 2001  
For: Flexible Processing Apparatus for Isolating and Purifying  
Viruses, Soluble Proteins and Peptides from Plant Sources  
Attorney's Docket No. N-7815

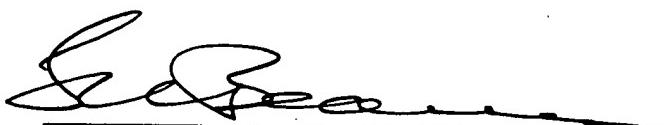
**INFORMATION DISCLOSURE STATEMENT**

To The Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Sir:

Applicants and their attorneys are aware of the prior art references listed on the enclosed Form PTO-1449. Copies of the cited references are also enclosed.

Respectfully submitted,



Lucian Wayne Beavers  
Registration No. 28,183  
WADDEY & PATTERSON  
414 Union Street, Suite 2020  
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Nashville, TN 37219  
(615) 242-2400  
Attorneys for Applicant



CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that this INFORMATION DISCLOSURE STATEMENT, Form PTO-1449 and copies of cited references are being deposited with the United States Postal Service as first class mail in an envelope addressed to:

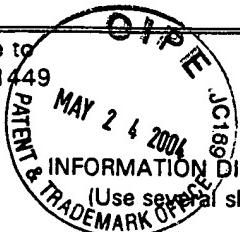
Assistant Commissioner for Patents  
Washington, DC 20231

on Jan. 14, 2002

Lucian Wayne Beavers

Signature  
Registration Number 28,183

Jan. 14, 2002  
DATE

Comparable to  
Form PTO-1449U.S. Department of Commerce  
Patent & Trademark OfficeINFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)

Atty. Docket No.

Serial No.

N-7815

09/970,150

## Applicant

Bratcher et al.

Filing Date  
October 3, 2001Group  
Unknown

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date If Appropriate
		4,268,632	May 19, 1981	Wildman et al.	435	232	
		4,333,871	Jun. 8, 1982	De Jong	260	112	
		4,347,324	Aug. 31, 1982	Wildman et al.	435	232	
		4,540,490	Sep. 10, 1985	Shibata et al.	210	323.2	
		4,632,318	Dec. 30, 1986	Hyuga	241	37	
		4,941,484	Jul. 17, 1990	Clapp et al.	131	297	
		4,966,576	Oct. 30, 1990	Schulz et al.	494	56	
		5,121,757	Jun. 16, 1992	White et al.	131	297	
		5,131,414	Jul. 21, 1992	Fagg et al.	131	297	
		5,267,937	Dec. 7, 1993	Zettier et al.	494	56	
		5,377,698	Jan. 3, 1995	Litzinger et al.	131	370	
		5,676,631	Oct. 14, 1997	Kunz et al.	494	71	
		5,765,570	Jun. 16, 1998	Litzinger et al.	131	370	
		5,795,477	Aug. 18, 1998	Herman et al.	210	360.1	
		5,865,719	Feb. 2, 1999	Droste et al.	494	27	
		5,899,845	May 4, 1999	Kohlstette et al.	494	37	
		6,083,293	Jul. 4, 2000	Bath	71	16	
		6,106,715	Aug. 22, 2000	Thalmann et al.	210	321.83	

## MISCELLANEOUS DOCUMENTS

Samuel Wildman, "An Alternate Use For Tobacco Agriculture: Proteins For Food Plus A Safer Smoking Material" in *Plants: The Potentials For Extracting Protein, Medicines And Other Useful Chemicals – Workshop Proceedings* (U.S. Congress, Office of Technology Assessment, OTA-BP-23, Washington, DC, September 1983).

L. Jervis and W.S. Pierpoint (1989) Purification technologies for plant proteins, *Jour. of Biotechnology* 11:161-198.

Examiner:

Date Considered

\*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Bratcher et al.  
Serial No.: 09/970,150  
Filed: October 3, 2001  
For: Flexible Processing Apparatus For Isolating And Purifying  
Viruses, Soluble Proteins And Peptides From Plant Sources  
Group No. 2161  
Attorney's Docket No. N7815

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §1.56, applicant hereby calls to the attention of the Patent and Trademark Office the following patents and other documents which are listed on attached Form PTO-1449.

Each document listed in this Supplemental Information Disclosure Statement was cited in a communication from the United States Patent Office in a counterpart PCT application, and this Supplemental Information Disclosure Statement is being filed within three months of the mailing date of that communication.

1. U.S. Patent No. 6,037,456 issued March 14, 2000, to Garger et al.
2. US2002/0088024 A1 Patent App. Pub. Garger et al., Pub. Jul. 4, 2002.
3. Lamsal et al., Separation of Protein Fractions in Alfalfa Juice: Effects of Some Pre-treatment Methods. TEKTRAN. Published September 6, 2002 by the United States Department of Agriculture Agricultural Research Service.

Copies of the listed documents are attached.

Applicant respectfully requests that these references be considered by the Examiner and made of record as part of the "available prior art" under 37 C.F.R. §1.104.

The Commissioner is authorized to charge any deficiency or credit any overpayment in connection with this Information Disclosure Statement to Deposit Account No. 23-0035.

Respectfully submitted,

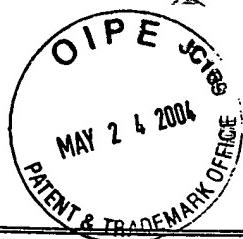
  
Emily A. Shouse  
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ATTORNEY FOR APPLICANT

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CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that this Supplemental Information Disclosure Statement is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Mail Stop IDS, P.O. Box 1450, Alexandria, VA 22313-1450, on 5-1-03.

  
Claire Ulanoff



Page 1 of 1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Bratcher et al.  
Serial No.: 09/970,150  
Filed: October 3, 2001  
For: Flexible Processing Apparatus For Isolating And Purifying  
Viruses, Soluble Proteins And Peptides From Plant Sources  
Group No. 1631  
Attorney's Docket No. N7815  
Customer No. 23456

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §1.56 and § 1.97(c), applicant hereby calls to the attention of the Patent and Trademark Office the following patents and other documents which are listed on attached Form PTO-1449.

This Information Disclosure Statement is being filed after the events recited in Section 1.97(b) but, to the undersigned's knowledge, before the mailing date of either a Final Action or a Notice of Allowance. Under the provisions of 37 C.F.R. § 1.97(c), this Information Disclosure Statement is accompanied by a fee of \$180.00 as specified by Section 1.17(p).

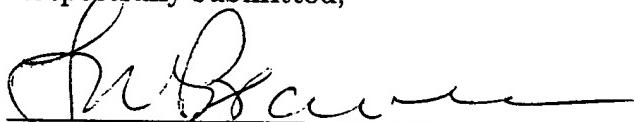
1. Project Progress Report - Chemical Efficiency of the Pilot Plant in Owensboro - Part IV; Author Jan Arnarp, October 11, 1995;
2. FOU Report No. 96/01 - Chemical Efficiency of the Pilot Plant in Owensboro - Part IV, Author Jan Arnarp, August 29, 1996.

Copies of the listed documents are attached.

Applicant respectfully requests that these references be considered by the Examiner and made of record as part of the "available prior art" under 37 C.F.R. §1.104.

The Commissioner is authorized to charge any deficiency or credit any overpayment in connection with this Information Disclosure Statement to Deposit Account No. 23-0035.

Respectfully submitted,



Lucian Wayne Beavers  
Registration No. 28,183  
WADDEY & PATTERSON  
A Professional Corporation  
Customer No. 23456  
ATTORNEY FOR APPLICANT

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Nashville, TN 37219  
(615) 242-2400



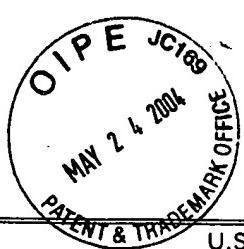
CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that this Supplemental Information Disclosure Statement, along with a check in the amount of \$180 is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 16, 2004.

Lucian Wayne Beavers

Registration No. 28,183

4/16/04  
Date



Page 1 of 1

Comparable to  
Form PTO-1449

**U.S. Department of Commerce  
Patent & Trademark Office**

**Atty. Docket No.**

**Serial No.**

N7815  
Customer No. 23456

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

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**Applicant**

Bratcher et al.

**Filing Date**

October 3, 2001

**Group**

1631

## MISCELLANEOUS DOCUMENTS

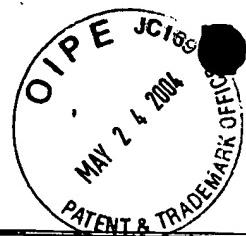
**Project Progress Report - Chemical Efficiency of the Pilot Plant in Owensboro - Part IV;  
Author: Jan Arnarn, October 11, 1995:**

FOU Report No. 96/01 - Chemical Efficiency of the Pilot Plant in Owensboro - Part IV  
Author Jan Arnarn, August 29, 1996

Examiner:

### Date Considered

\*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Page 1 of 1

Comparable to  
Form PTO-1449

**U.S. Department of Commerce  
Patent & Trademark Office**

**Atty. Docket No.**

**Serial No.**

N7815

Bratcher et al.

**Filing Date**  
October 3, 2001

Group 163  
-216+

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MAY 13 2003

# GROUP 3600

**MISCELLANEOUS DOCUMENTS**

AM

US 2002/0088024 A1 Patent Application Publication, Garger et al., Pub. Date Jul. 4, 2002

Lamsal et al., Separation of Protein Fractions in Alfalfa Juice: Effects of Some Pre-treatment Methods. TEKRAK. Published September 6, 2002 by the United States Department of Agriculture Agricultural Research Service.

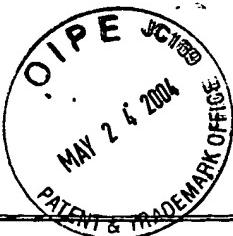
Examiner:

*André Morley*

**Date Considered**

1-9-04

\*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Page 1 of 1

Comparable to Form PTO-1449		U.S. Department of Commerce Patent & Trademark Office		Atty. Docket No.	Serial No.	
				N-7815	09/970,150	
				<b>RECEIVED</b>		
				Applicant	FEB 01 2002	
				Bratcher et al.	Technology Center 2100	
				Filing Date October 3, 2001	Group Unknown	1631
Examiner Initial	Document No.	Date	Name	Class	Subclass	Filing Date If Appropriate
AM	4,268,632	May 19, 1981	Wildman et al.	435	232	
	4,333,871	Jun. 8, 1982	De Jong	260	112	
	4,347,324	Aug. 31, 1982	Wildman et al.	435	232	
	4,540,490	Sep. 10, 1985	Shibata et al.	210	323.2	
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	4,941,484	Jul. 17, 1990	Clapp et al.	131	297	
	4,966,576	Oct. 30, 1990	Schulz et al.	494	56	
	5,121,757	Jun. 16, 1992	White et al.	131	297	
	5,131,414	Jul. 21, 1992	Fagg et al.	131	297	
	5,267,937	Dec. 7, 1993	Zettier et al.	494	56	
	5,377,698	Jan. 3, 1995	Litzinger et al.	131	370	
	5,676,631	Oct. 14, 1997	Kunz et al.	494	71	
	5,765,570	Jun. 16, 1998	Litzinger et al.	131	370	
	5,795,477	Aug. 18, 1998	Herman et al.	210	360.1	
	5,865,719	Feb. 2, 1999	Droste et al.	494	27	
	5,899,845	May 4, 1999	Kohistette et al.	494	37	
	6,083,293	Jul. 4, 2000	Bath	71	16	
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AM	Samuel Wildman, "An Alternate Use For Tobacco Agriculture: Proteins For Food Plus A Safer Smoking Material" in <u>Plants: The Potentials For Extracting Protein, Medicines And Other Useful Chemicals – Workshop Proceedings</u> (U.S. Congress, Office of Technology Assessment, OTA-BP-23, Washington, DC, September 1983).					
AM	L. Jervis and W.S. Pierpoint (1989) Purification technologies for plant proteins, <u>Jour. of Biotechnology</u> 11:161-198.					
Examiner:	Date Considered					
<i>Andrea Marzhet</i>	1-9-04					
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						



**Notice of References Cited**

Application/Control No.  
09/970,150

Applicant(s)/Patent Under  
Reexamination  
BRATCHER ET AL.

Examiner

Ardin Marschel

Art Unit  
1631

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
A	US-4,907,167	03-1990	Skeirik, Richard D.	700/10
B	US-5,993,795	11-1999	Osawa et al.	424/74
C	US-			
D	US-			
E	US-			
F	US-			
G	US-			
H	US-			
I	US-			
J	US-			
K	US-			
L	US-			
M	US-			

**FOREIGN PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
N					
O					
P					
Q					
R					
S					
T					

**NON-PATENT DOCUMENTS**

*	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)		
U	NEW RIVERSIDE UNIVERSITY DICTIONARY, [Published by The Riverside Publishing Company and Houghton Mifflin Company, One Beacon Street, Boston, Massachusetts, 02108, USA (1984)], page 589.		
V			
W			
X			

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.